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EXAMINER

FREISTEIN, ANDREW B

ART UNIT PAPER NUMBER

1626

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/707,402

Applicant(s)

LARKE, CARROLL W.

Examiner

Andrew B. Freistein

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/21/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-89 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-89 is/are rejected.
- 7) ☒ Claim(s) 1-89 is/are objected to.
- 8) ☒ Claim(s) 1-89 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/17/04; 2/12/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-89 are currently pending in the instant application.

Election/Restrictions

The Markush Group set forth in the claims includes both independent and distinct inventions, and patentably distinct compounds (species) within each invention. However, this application discloses and claims a plurality of patentably distinct inventions far too numerous to list individually. Moreover, each of these inventions contains a plurality of patentably distinct compounds, which are too numerous to list individually. **For the reasons provided below, restriction to one of the following Groups is required under 35 U.S.C. § 121**, wherein a Group is a set of patentable distinct inventions of a broad statutory category (e.g. compounds, methods of use, methods of making, etc.):

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

- I. **Claims 1-89**, drawn to a process for preparing a pentaerylthritol disphophite, classified in various subclasses of class 568.

In accordance with the decisions in *In re Harnisch*, 631 F.2d 716, 206 USPQ 300 (CCPA 1980); and *Ex parte Hozumi*, 3 USPQ2d 1059 (Bd. Pat. App. & Int. 1984), restriction of a Markush Group is proper where the compounds within the group either (1) do not share a common utility, or (2) do not share a substantial structural feature disclosed as being essential to that utility. In addition, a Markush Group may encompass a plurality of independent and distinct inventions where two or more members are so unrelated and diverse that a prior art reference anticipating the claim

with respect to one of the members would not render the other member(s) obvious under 35 U.S.C. § 103.

An election of the synthesis of a single pentaerythritol diphospite compound is further required including an exact definition of each substitution on the base molecule, wherein a single member at each substituent group or moiety is selected. For example, if a base molecule has a substituent group R1, wherein R1 is recited to be any one of H, OH, COOH, aryl, alkoxy, halogen, amino, etc., then applicant must select a single substituent of R1, for example OH or aryl and each subsequent variable position. Submission of a chemical structure of the species will fulfill this requirement.

In the instant case, upon election of a single compound the Office will review the claims and disclosure to determine the scope of the independent invention encompassing the elected compound (compounds that are so similar thereto as to be within the same inventive concept and reduction to practice). The scope of an independent invention will encompass all compounds within the scope of the claim, which fall into the same class and subclass as the elected compound, but may also include additional compounds, which fall in related subclasses.

Examination will then proceed on the elected compound as defined by common classification AND the entire scope of the invention encompassing the elected compound as defined by common classification. A clear statement of the examined invention, defined by those class(es) and subclass(es) will be set forth in the first action on the merits. Note that the restriction requirement will not be made final until such time

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as applicant is informed of the full scope of compounds along with (if appropriate) the process of using or making said compound under examination. This will be set forth by reference to specific class(es) and subclass(es) examined.

Should applicant traverse on the ground that the compounds are not patentably distinct, applicant should submit evidence or identity such evidence now of record showing the compound to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in rejection under 35 U.S.C. § 103(a) of the other.

All compounds falling outside the class(es) and subclass(es) of the selected compound and any other subclass encompassed by the election above will be directed to nonelected subject matter and will be withdrawn from consideration under 35 U.S.C. § 121 and 37 C.F.R. 1.142(b). Applicant may reserve the right to file divisional applications on the remaining subject matter. (The provisions of 35 U.S.C. § 121 apply with regard to double patenting covering divisional applications.)

Applicant is reminded that upon cancellation of claims to a nonelected invention, the inventions must be amended in compliance with 37 C.F.R. 1.48(b) if one of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 C.F.R. 1.48(b) and by the fee required under 37 C.F.R. 1.17(i).

If desired upon election of a single compound, applicant can review the claims and disclosure to determine the scope of the invention and can set forth a group of

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compounds which are so similar, within the same inventive concept and reduction to practice. Markush claims must be provided with support in the disclosure for each member of the Markush group. See MPEP 608.01(p). Applicant should exercise caution in making a selection of a single member for each substituent group on the base molecule to be consistent with the written description.

Rational Establishing Patentable Distinctiveness Within Each Group

Each Group listed above is directed to or involves the use of compounds which are recognized in the art as being distinct from one another because of their diverse chemical structure, their different chemical properties, modes of action, different effects and reactive conditions (MPEP 806.04, MPEP 808.01). Additionally, the level of skill in the art is not such that one invention would be obvious over the other invention (Group), i.e. they are presumed patentable over each other. Chemical structures that are similar are presumed to function similarly, whereas chemical structures that are not similar are not presumed to be function similarly. The presumption even for similar chemical structures though is not irrebuttable, but may be overcome by scientific reasoning or evidence showing that the structure of the prior art would not have been expected to function as the structure of the claimed invention. Note that in accordance with the holding of ***Application of Papesch***, 50 CCPA 1084, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) and ***In re Lalu***, 223 USPQ 1257 (Fed. Cir. 1984), chemical structures are patentably distinct where the structures are either not structurally similar, or the prior art fails to suggest a function of a claimed compound would have been expected from a similar structure.

The above groups represent general areas wherein the inventions are independent and distinct, each from the other because of the following reasons:

Invention I consists of unrelated processes of preparation. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions or different effects (MPEP 806.04, MPEP 808.01). In the instant case the inventions are drawn to distinct methods of preparing distinct compounds, which will use different starting materials, reagents, and reaction conditions as illustrated in paragraphs [0039] –[0081] of the Specification.

In addition, due to the plethora of classes and subclasses in each of the Groups, a serious burden is imposed on the examiner to perform a complete search of the defined areas. Therefore, because of the reasons given above, the restriction set forth is proper and not to restrict would impose a serious burden in the examination of the application.

Advisory of Rejoinder

The following is a recitation of MPEP 821.04, Rejoinder:

Where product and process claims drawn to independent and distinct inventions are presented in the same application, applicant may be called upon under 35 U.S.C. 121 to elect claims to either the product or process. See MPEP § 806.05(f) and § 806.05(h). The claims to the nonelected invention will be withdrawn from further consideration under 37 CFR 1.142. See MPEP § 809.02(c) and § 821 through § 821.03. However, if applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims, which depend from or otherwise include all the limitations of the allowable product claim will be rejoined.

Where the application as originally filed discloses the product and the process for making and/or using the product, and only claims directed to the product are presented for examination, when a product claim is found allowable, applicant may present claims directed to the process of making and/or using the patentable product by way of amendment pursuant to 37 CFR 1.121. In view of the rejoinder procedure, and in order to expedite prosecution, applicants are encouraged to present such process claims, preferably as dependent claims, in the application at an early stage of prosecution. Process claims, which depend from or otherwise include all the limitations of the

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patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance. Amendments submitted after final rejection are governed by 37 CFR 1.116. Process claims which do not depend from or otherwise include the limitations of the patentable product will be withdrawn from consideration, via an election by original presentation (see MPEP § 821.03). Amendments submitted after allowance are governed by 37 CFR 1.312. Process claims which depend from or otherwise include all the limitations of an allowed product claim and which meet the requirements of 35 U.S.C. 101, 102, 103, and 112 may be entered.

Where product and process claims are presented in a single application and that application qualifies under the transitional restriction practice pursuant to 37 CFR 1.129(b), applicant may either: (A) elect the invention to be searched and examined and pay the fee set forth in 37 CFR 1.17(s) and have the additional inventions searched and examined under 37 CFR 1.129(b)(2); or (B) elect the invention to be searched and examined and not pay the additional fee (37 CFR 1.129(b)(3)). Where no additional fee is paid, if the elected invention is directed to the product and the claims directed to the product are subsequently found patentable, process claims which either depend from or include all the limitations of the allowable product will be rejoined. If applicant chooses to pay the fees to have the additional inventions searched and examined pursuant to 37 CFR 1.129(b)(2) even if the product is found allowable, applicant would not be entitled to a refund of the fees paid under 37 CFR 1.129(b) by arguing that the process claims could have been rejoined. 37 CFR 1.26(a) states that "[T]he Commissioner may refund any fee paid by mistake or in excess of that required. A change of purpose after the payment of a fee...will not entitle a party to a refund of such fee..." In this case, the fees paid under 37 CFR 1.129(b) were not paid by mistake nor paid in excess, therefore, applicant would not be entitled to a refund. In the event of rejoinder, the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. If the application containing the rejoined claims is not in condition for allowance, the subsequent Office action may be made final, or, if the application was already under final rejection, the next Office action may be an advisory action. Form paragraphs 8.42 through 8.44 should be used to notify applicant of the rejoinder of process claims which depend from or otherwise include all the limitations of an allowable product claim.

In the event of rejoinder, the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104 - 1.106. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. If the application containing the rejoined claims is not in condition for allowance, the subsequent Office action may be made final, or, if the application was already under final rejection, the next Office action may be an advisory action.

The following is a recitation from paragraph five, "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai*, *In re Brouwer* and 35 U.S.C. §103(b)" (1184 TMOG 86(March 26, 1996)):

"However, in the case of an elected product claim, rejoinder will be permitted when a product claim is found allowable and the withdrawn process claim **depends from or otherwise includes all the limitations of** an allowed product claim. Withdrawn process claims not commensurate in scope with an allowed product claim will not be rejoined." (emphasis added)

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 C.F.R. 1.143).

Applicant is reminded that upon the cancellation of the claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claims remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 C.F.R. 1.48(b) and by the fee required under 37 C.F.R. 1.17(i).

During a telephone conversation with Attorney Louis F. Wagner on September 20, 2006 an oral election was made *with traverse* to prosecute the invention of Group I, Claims 1-89, and identified the species of claim 59 for search purposes.

Status of the Claims

Claims 1-89 (in part) are withdrawn from further consideration by the Examiner as being drawn to non-elected inventions under 37 CFR § 1.142(b). The withdrawn subject matter is patentably distinct from the elected subject matter as it differs in structure and element and would require separate search considerations. In addition, a reference that anticipates one invention would not render obvious the other invention.

Elected and Examined Subject Matter

The scope of the invention of the elected subject matter and the examined subject matter is as follows:

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A method of synthesizing pentaerythritol diphosphites of the formula (VI),



wherein R² is an optionally substituted phenyl group and

the monophosphite is triphenylphosphite, trimethylphosphite or triethylphosphite.

Non-elected and Non-examined Subject Matter

The scope of the invention of the non-elected and non-examined subject matter is as follows:

A method of synthesizing pentaerythritol diphosphites of the formula (VI),



wherein R² is C₈₋₂₂ alkyl, C₈₋₂₂ alkenyl, C₇₋₄₀ alkylaryl

and C₇₋₄₀ arylalkyl.

As a result of the election and the corresponding scope of the invention, identified supra, the remaining subject matter of Claims 1-89 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to non-elected inventions.

Therefore, the subject matter which was withdrawn from consideration as being non-elected subject matter materially differs in structure and composition from the elected/examined subject matter so that a reference which anticipates the elected/examined subject matter would not render obvious the non-elected subject matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –


(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.


Claims 1-89 are rejected under 35 U.S.C. 102(b) as being anticipated by

Stevenson et al., US Pat. No. 5,438,086.

Claims 1-89 are drawn to an improved method for synthesizing pentaerythritol

diphosphites of the formula (VI), , wherein R² is phenyl, comprising the steps of

(a) transesterifying pentaerythritol of formula (I),  with a monophosphite to form a first reaction mixture, which comprises an intermediate

pentaerythritol diphosphite having the formula (III), , wherein R¹ is a C₆ aryl group, a caged isomer of formula (IV),


, unreacted monophosphite and side reaction products;

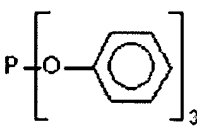
(b) removing reaction products other than the intermediated pentaerythritol diphosphite of formula (III);

(c) transesterifying the intermediated pentaerythritol diphosphite of formula (III) with an alcohol to form a second reaction mixture, which comprises the final product.

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Claim 59 is drawn to an improved method for synthesizing bis(2,4-dicumylphenyl)pentaerythritol, comprising the steps:

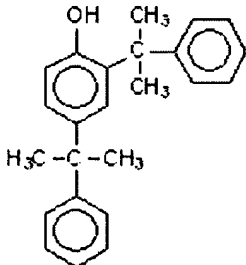
(a) transesterifying pentaerythritol of formula (I),  with a triphenyl

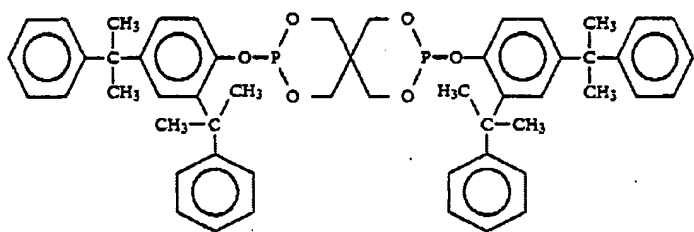
phosphate of formula (II), , to form an intermediate reaction comprising

diphenyl pentaerythritol diphosphate of formula (V), ,

(b) removing phenol and reaction products other than diphenylpentaerythritol diphosphate;

(c) transesterifying said intermediate pentaerythritol diphosphate with 2,4-dicumyl

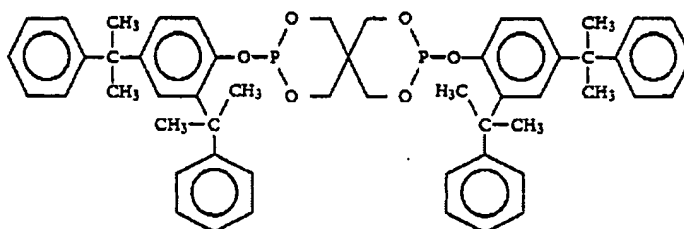
phenol of formula (VII),  to form a second reaction mixture comprising

the final product of formula (VIII), ; and

(d) removing phenol from the second reaction mixture.

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Stevenson et al. disclose the preparation of bis(2,4-dicumylphenyl)pentaerythritol



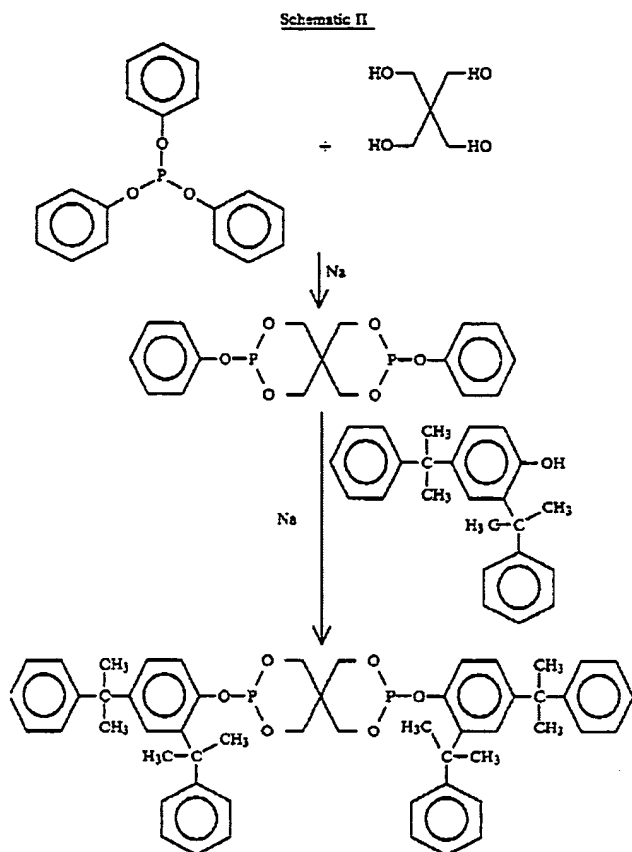
diphosphite of formula (V),

comprising the steps:

- (a) Combining triphenylphosphite (a monophosphite), pentaerythritol and phenol;
- (b) Adding sodium metal to the reaction and heating;
- (c) Distilling off the phenol;
- (d) Adding 2,4-dicumylphenol and more sodium metal;
- (e) Cooling the mixture and crystallizing the product. The following scheme

depicts the reaction:

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(see col. 15, line 55 – col. 16, line 17,

Example #3 and col. 17, lines 1-40).

In this case, claim 59 follows the exact same scheme as the prior art and claims 1-58 and 60-89 follow the general scheme of Stevenson et al, with a few more limitations.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.


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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:


1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

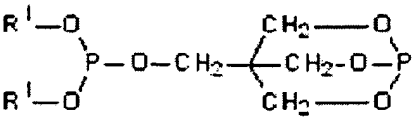
Claims 1-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevenson et al., US Pat. No. 5,438,086.

Claims 1-89 are drawn to an improved method for synthesizing pentaerythritol

diphosphites of the formula (VI), , wherein R² is phenyl, comprising the steps of

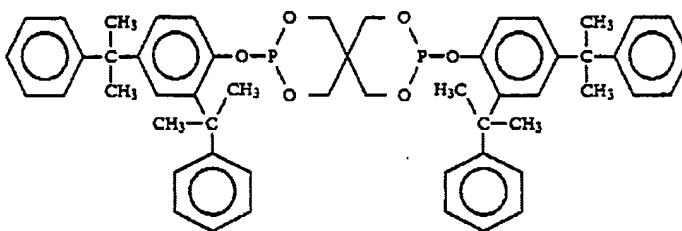
(a) transesterifying pentaerythritol of formula (I),  with a monophosphite to form a first reaction mixture, which comprises an intermediate

pentaerythritol diphosphite having the formula (III), , wherein R¹ is a C₆ aryl group, a caged isomer of formula (IV),

, unreacted monophosphite and side reaction products;

(c) transesterifying the intermediated pentaerythritol diphosphite of formula (III) with an alcohol to form a second reaction mixture, which comprises the final product.

Stevenson et al. disclose the preparation of bis(2,4-dicumylphenyl)pentaerythritol

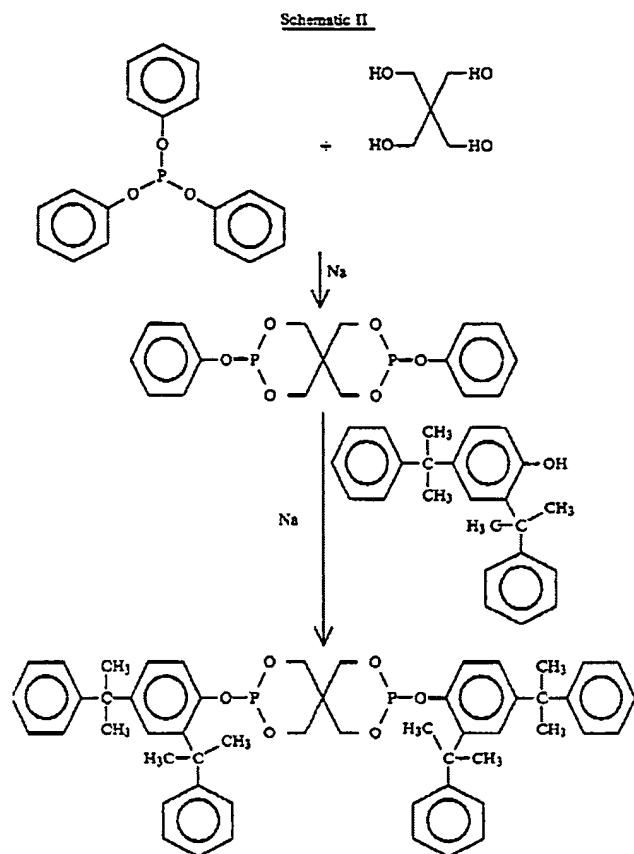


diphosphite of formula (V),

comprising the steps:

- Combining triphenylphosphite (a monophosphite), pentaerythritol and phenol;
- Adding sodium metal to the reaction and heating;
- Distilling off the phenol;
- Adding 2,4-dicumylphenol and more sodium metal;
- Cooling the mixture and crystallizing the product. The following scheme

depicts the reaction:



(see col. 15, line 55 – col. 16, line 17,

Example #3 and col. 17, lines 1-40).

Ascertaining the Difference Between the Prior Art and the Instant Application

In step (a) of the instant application, in the first reaction mixture, the intermediate

of a caged isomer having formula (IV),
$$\begin{array}{c} \text{R}^1-\text{O} \\ | \\ \text{P}-\text{O}-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{O}-\text{P} \\ | \\ \text{R}^1-\text{O} \end{array}$$
, is present.

However, in the prior art process there is no disclosure of such an intermediate being present in the reaction.

Finding Prima Facie Obviousness

The intermediate of formula (IV) is inherently present in the reaction mixture in the prior art. One of ordinary skill in the art who follows the same reaction mechanism

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would expect the same reaction intermediates to be present. Disclosing a reaction intermediate as a limitation in the claim does not provide a patentably distinct invention. Absent some unexpected results in the claimed improved method, there is nothing novel and unobvious about the instant synthesis.

In order to show an improved synthesis and a patentably distinct invention, Applicant must provide an affidavit showing a side-by-side comparison of the instant reaction and the prior art reaction, which leads to unexpected results. Absent such a showing, the instant claims are obvious in view of Stevenson et al.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-89 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(1) Claim 1 is a Jepson-type claim, because it is an improvement over the prior art. The preamble is treated as an admission that the claimed synthesis already exists in the prior art.

According to 37 CFR 1.75(e), "Where the nature of the case admits, as in the case of an improvement, any independent claim should contain in the following order:

(1) A preamble comprising a general description of all the elements or steps of the claimed combination which are conventional or known,

(2) A phrase such as "wherein the improvement comprises," and

(3) Those elements, steps, and/or relationships which constitute that portion of the claimed combination which the applicant considers as the new or improved portion.” (see MPEP 608.01(m) and 37 CFR 1.75(e)).

In the instant case, the claims do not indicate the known elements, what the improvement comprises, and the elements, steps and/or relationships that constitute the improvement.

(2) In claim 1, step (a) requires transesterifying pentaerythritol of formula (I) with a monophosphite. However, the monophosphite is not identified. The specification identifies the monophosphite can be selected from triphenyl phosphate, trimethylphosphite, or triethylphosphite. In order to overcome this rejection, claim 1 should be amended to state the monophosphite is selected from the group consisting of triphenyl phosphate, trimethylphosphite, or triethylphosphite.

(3) In claim 1, lines 16-17, the term “C₆₋₁₁ substituted derivatives thereof” is indefinite. The specification provides no guidance as to what “derivates thereof” of a substituent is. Proper Markush language provides for alternatives. This is an open-ended phrase that permits the variables to be any possible substituent.

(4) In claim 1, on page 2, in lines 2-3, the terms “blends thereof” is indefinite. The specification provides no guidance as to what is a “blend” is.

Claim Objections

(1) Claims 1-89 are objected to as being drawn to non-elected subject matter.

(2) In claim 1, in lines 13 and 14, the line “wherein R¹ is selected from the group consisting of” is listed twice. One of the lines must be deleted.

(3) Claim 32 is objected to, because there is no space between "claim 31" and "wherein."

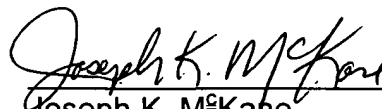
Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew B. Freistein whose telephone number is (571) 272-8515. The examiner can normally be reached Monday-Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph M^cKane can be reached on (571) 272-0699. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Date: September 22, 2006